

## REMARKS

In the Office Action, the Examiner objected to Figure 10 of the drawings and rejected claims 1-19 under 35 U.S.C. 102(b) as being unpatentable over Pedersen et al. (U.S. Patent No. 6,134,705). In this Amendment, no claims have been canceled or added. Accordingly, claims 1-19 will be pending after entry of this Amendment.

### **I. Amendment to the Specification and Drawings**

In this Amendment, Applicants have removed embedded hyperlinks and corrected four typographical errors in the drawings and three typographical errors in the specification. No new matter had been added, as all the corrections are supported by the discussion in the specification and by the illustrations in the figures. Specifically, Applicants moved a “From 615” transitional arrow that previously pointed to operation 660 in the flowchart illustrated in Figure 6B to now point to the operation 655. This change is supported by (1) the referenced transition from 615 to 655 in Figure 6A, (2) the discussion in the specification on page 34, lines 5-7, and (3) the discussion in the specification on page 34, lines 8-22, which provides the rationale as to why the process 600 of Figure 6 transitions to 655 from 615 and 645.

Applicants also corrected the description of the operation 1445 in Figure 14. This correction is supported by the description in the specification on page 51, lines 15-17. In addition, Applicants added a “From 2242” transitional arrow to operation 2228 on Figure 22B. This correction is supported by the description in the specification on page 72, lines 14-15. Applicants also corrected the numbering of operation 2246 in Figure 22C. This correction is supported by the description in the specification on page 72, lines 19-20.

In the specification on page 31, Applicants changed an inaccurate reference to a transition from 615 to 660 in Figure 6B, to an accurate reference regarding a transition from 615 to 655. As mentioned above, this change is supported by (1) the referenced transition from 615 to 655 in Figure 6A, (2) the discussion in the specification on page 34, lines 5-7, and (3) the discussion in the specification on page 34, lines 8-22, which provides the rationale as to why the process 600 of Figure 6 transitions to 655 from 615 and 645.

On page 72, line 13, Applicants have also changed "2242" to "2202." This is a reference number for the operation that the process 2200 of Figures 22A-22C performs to generate several graphs. As mentioned in the specification on page 65, line 1 to page 66, line 16, the process 2200 generates these graphs at 2202. *See also* page 70, lines 15-17. Finally, on page 73, lines 2-3, Applicants have changed "[a]fter 2244, the process ends," to "[a]fter 2246, the process ends." As shown in Figure 22C, the process 2200 ends after it completes the database tables; as specified in the specification, the process 2200 completes the database tables at 2246, which proceeds 2244 in Figure 22C. *See* page 72, lines 19-20.

## **II. Objection to the Figure 10**

In the Office Action, the Examiner objected to Figure 10 of the drawings because the input of element X0 to gate 1020 crosses over element X1 which suggests a short of the two elements. Figure 10 has been amended to address the Examiner's objection thereof.

## **III. Rejections under 35 U.S.C. 102(b)**

In the Office Action, the Examiner rejected claims 1-19 under 35 U.S.C. 102(b) as being unpatentable over Pedersen et al. (U.S. Patent No. 6,134,705, hereinafter Pedersen). The Applicants respectfully traverse. Claim 1 recites a data storage structure that stores a plurality of

sub-networks, wherein each sub-network performs an output function, wherein the data storage structure stores each sub-network based on a parameter derived from the output function of the sub-network.

Pedersen does not teach or suggest each recited feature of claim 1. For example, Pedersen does not teach or suggest storing each sub-network based on a parameter derived from the output function of the sub-network, as required in claim 1. The Examiner states that Pedersen discloses these limitations in Figures 7E and 7F and in column 16, lines 21-39. In the portions cited by the Examiner, Pedersen illustrates the difference between hard registers (registers that are not modified during synthesis) and soft registers (registers that are modified during synthesis). Figures 7E and 7F show that since register 786 is unchanged during synthesis, it qualifies as a hard register and since registers 788 and 790 are combined into register 789 during synthesis, neither register 788 nor 790 qualifies as a hard register. Although Pedersen discloses that hard registers can serve as external nodes for purposes of identifying a sub-netlist, no where in Pedersen is it taught or suggested that a sub-network is stored in a data storage structure based on a derived parameter, as required in claim 1. Identifying a sub-netlist using an external node and storing a sub-network in a data storage based on a derived parameter are two unrelated features that serve different purposes. It should be further noted that identifying a sub-netlist using an external node does not even require use of a data storage.

As such, Applicants submit that Pedersen does not teach or suggest each limitation of claim 1 and that claim 1 is in allowable form. Claims 2-10 are dependent on claim 1 and are allowable for at least the same reasons as claim 1. Claim 11 is an independent claim containing the “data structure that stores a sub-network based on a derived parameter” limitation of claim 1

and is allowable for at least the same reasons as claim 1. Claims 12-19 are dependent on claim 11 and are allowable for at least the same reasons as claim 11.

#### **IV. Information Disclosure Statement**

Accompanying this Amendment is the 1449 form of an Information Disclosure Statement that Applicants are submitting concurrently with but separately from this Amendment. This Information Disclosure Statement lists and provides copies of several additional references for the Examiner's consideration. The Examiner is requested to make these documents of record.


## CONCLUSION

Based on the foregoing remarks, Applicants believe that the rejections and objections in the Office Action of July 27, 2004 are fully overcome and that the application is in condition for allowance. If the Examiner has any questions regarding the case, the Examiner is invited to contact Applicants' undersigned representative at the number given below.

Respectfully submitted,

STATTLER, JOHANSEN & ADELI LLP

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**Amendments to the Drawings:**

Attached are five sheets of drawings that include changes to Figures 6B, 10, 14, 22B, and 22C. These sheets replace the original four sheets that included Figures 6B, 10, 14, 22B, and 22C. The Examiner is respectfully requested to approve the amended drawings.